

What is claimed is:

1. A method of cleaning an epitaxial deposition apparatus comprising:
increasing the surface temperature of a bell jar in said epitaxial deposition
5 apparatus to a first predetermined temperature range;
measuring the air flow temperature within an exhaust plenum of said epitaxial
deposition apparatus;
introducing a reactive gas capable of reacting at said first predetermined
temperature range with material deposited on the inside surface of said
10 bell jar and forming gaseous by-products; and
maintaining the temperature of said bell jar surface at said first predetermined
temperature range for a time sufficient to allow said material deposited on
said inside surface of said bell jar to be removed.
- 15 2. The method as claimed in Claim 1 wherein said method further includes
removing said gaseous by-products from said bell jar.
3. The method as claimed in Claim 2 wherein said removing step is performed
by purging said bell jar with a purging gas.
- 20 4. The method as claimed in Claim 1 wherein said method further includes
measuring the transparency of said bell jar wall.
5. The method as claimed in Claim 1 wherein said method further includes
25 purging said reactive gas from said bell jar.
6. The method as claimed in Claim 1 wherein said method further includes
decreasing the temperature of said bell jar surface to a second predetermined
temperature after removal of said deposited material from the inside surface
30 of said bell jar.

7. The method as claimed in Claim 1 wherein said step of increasing said temperature further includes reducing the speed of an air-circulating blower of said epitaxial deposition apparatus wherein the air flow caused by said blower flows past said bell jar and is used to control the temperature of said bell jar surface.

8. The method as claimed in Claim 1 wherein said step of maintaining the temperature of said bell jar surface at said first predetermined temperature range further includes measuring the surface temperature of said bell jar surface.